

Spectrum Enterprise Overview

Anthony Fargo and Paul Molchany

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Who are we?



- **Spectrum Enterprise is a part of Charter Communications**, a Fortune 100 company, serving the unique needs of large organizations
- Provides network, cloud and IT infrastructure solutions and managed services to clients nationwide leveraging our wholly owned fiber network
- Collective power of Mid-Market, Enterprise and Carrier assets of Time Warner Cable Business Class, Spectrum Business Enterprise Solutions and Bright House Networks

Technology and expertise designed to master the complexity of today's digital enterprise



Fiber, Ethernet, Voice, Video



Fiber Internet
Access



Network
Solutions



Voice
Solutions



TV
Solutions

Managed Cloud Services



Core
Hosting



Managed
Multi-Cloud



Managed
Applications



End-User
Computing

Industry Solutions

Healthcare | Hospitality | Education | Government

Key IT Solutions

IT Infrastructure | Hybrid IT | Data Protection | Compliance

We're committed to an exceptional experience

With dedicated teams and self-service tools tailored to your needs

One Team to Guide & Advocate



Client Services Team
Project Managers
Local Construction Teams

- Billing questions or issues
- Change coordination
- Service restoration
- Service delivery & operations

Online Portal for Visibility & Control



- Easy self-service visibility and control with real-time status and reporting
- 24/7 access to detailed reports

Proactive Monitoring & Technical Support



Enterprise Network Operations Center

- Proactive monitoring from experienced NOC technicians
- Technicians remain in personal contact until issues are resolved
- Rapid call answer within 30 seconds
- Technical expertise from highly-trained NOC technicians

Stringent SLAs

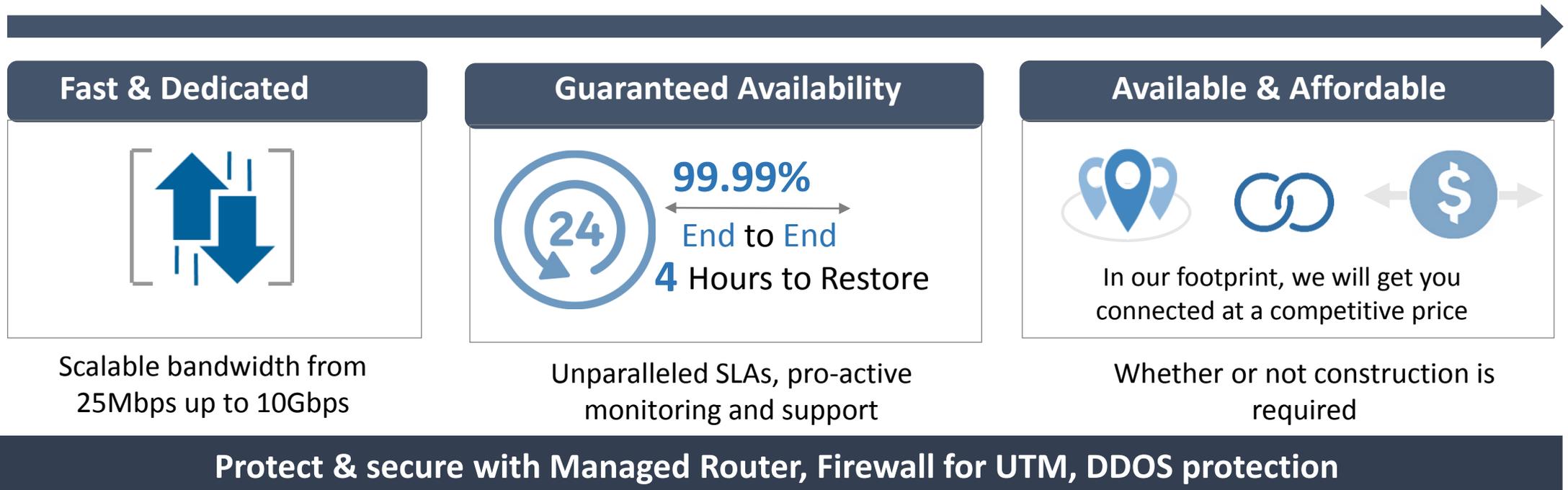


- SLAs that cover our entire network including the connection to your premise equipment
- Guaranteed Time to Restore within 4 hours

Fiber Internet Access

Build your business on a high-performance, dedicated connection

Deliver mission-critical client experiences, cloud-based and data-intensive applications, backup, video conferencing and more



Ethernet Services

Extend your network across town, nationwide and to the cloud



Fast, Scalable and Private, Managed WAN Solution

- Extend and secure your LAN with a high-capacity, high performance WAN
- Fiber delivered service available nationally
- Gain flexibility to quickly expand your network with new locations or higher bandwidths, with options from 10Mbps to 10Gps
- Add a router for true end-to-end management with real-time monitoring

Backed by Powerful SLAs

- Keep your network operational with Ethernet backed by enterprise-grade SLAs (across various geographical performance tiers)
- Enjoy peace of mind with a network built to MEF 2.0 certification standards with 650+ MEF Certified Professionals

2017

Analyst Leadership Award

3rd Largest

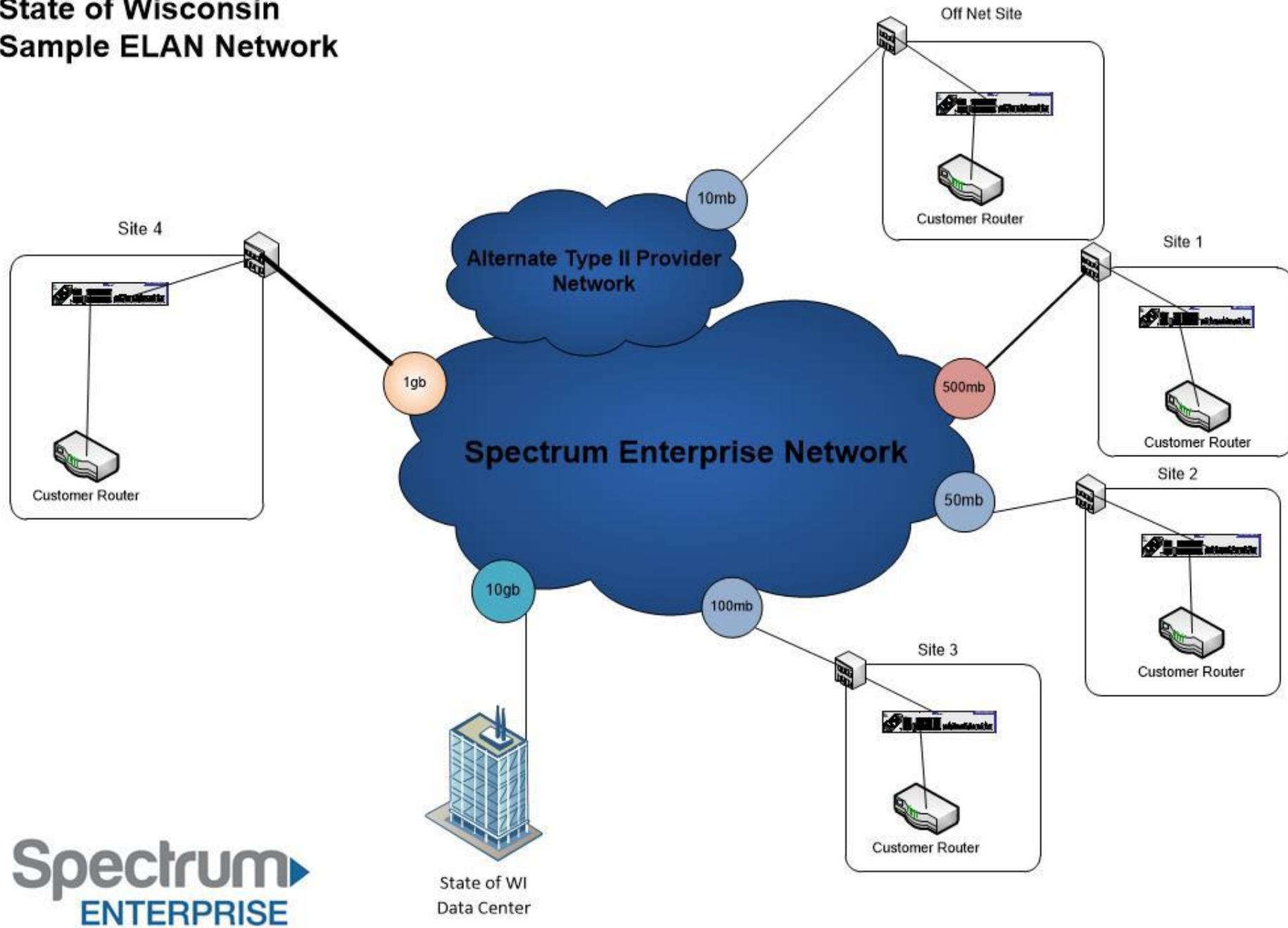
U.S. Ethernet Provider

650+

MEF Certified Specialists

| VERTICAL SYSTEMS GROUP | | LEADERBOARD | |
|--|---------------------|--------------------------------|--|
| YEAR-END | 2016 | U.S. CARRIER ETHERNET SERVICES | |
| RANK | ETHERNET PROVIDERS | | |
| 1 | AT&T | | |
| 2 | Level 3 | | |
| 3 | Spectrum Enterprise | | |
| 4 | Verizon | | |
| 5 | CenturyLink | | |
| 6 | Comcast | | |
| 7 | XO | | |
| 8 | Windstream | | |
| 9 | Cox | | |
| CHALLENGE TIER (in alphabetical order) | | | |
| Altice USA, Cogent, Sprint, Zayo | | | |
| www.verticalsystems.com | | | |

State of Wisconsin Sample ELAN Network



Contracting Vehicles for Procurement- Internet Services

State of Wisconsin, Department of Administration, Division of Enterprise Technology and Charter Communications Operating, LLC

Contract No: 505ENT-014-BusinessISP 06

Contract Title: Internet Services Provider (ISP) Services

Services Include: Coax Business Internet Access (BIA), Fiber Internet Access (FIA), Static IP addresses, Managed Router Service

Contracting Vehicles for Procurement- Internet Services

- (3) Coax Business Internet Tiers for all new site requests
 - 60Mbps/5Mbps
 - 100Mbps/10Mbps
 - 300M/20Mbps

Migration Plan analysis available for all existing service locations to new Coax tiers
Or to Fiber Internet Access Tiers

- (9) Fiber Internet Access Tiers
 - 25Mbps/25Mbps 1Gbps/1Gbps
 - 50 Mbps/50Mbps 2Gbps/2Gbps
 - 100 Mbps/100Mbps 5Gbps/5Gbps
 - 200 Mbps/200 Mbps 10Gbps/10Gbps
 - 500 Mbps/500 Mbps

Contracting Vehicles for Procurement- Ethernet Transport Services

University of Wisconsin- Madison and Charter Communications Operating, LLC

Contract No: 14-5535

Contract Title: Services for Data Communication Circuits

Services Include: Metro Ethernet Services- Ethernet Private LAN or Ethernet Line

Bandwidth options available ranging from 10Mbps to 10Gbps

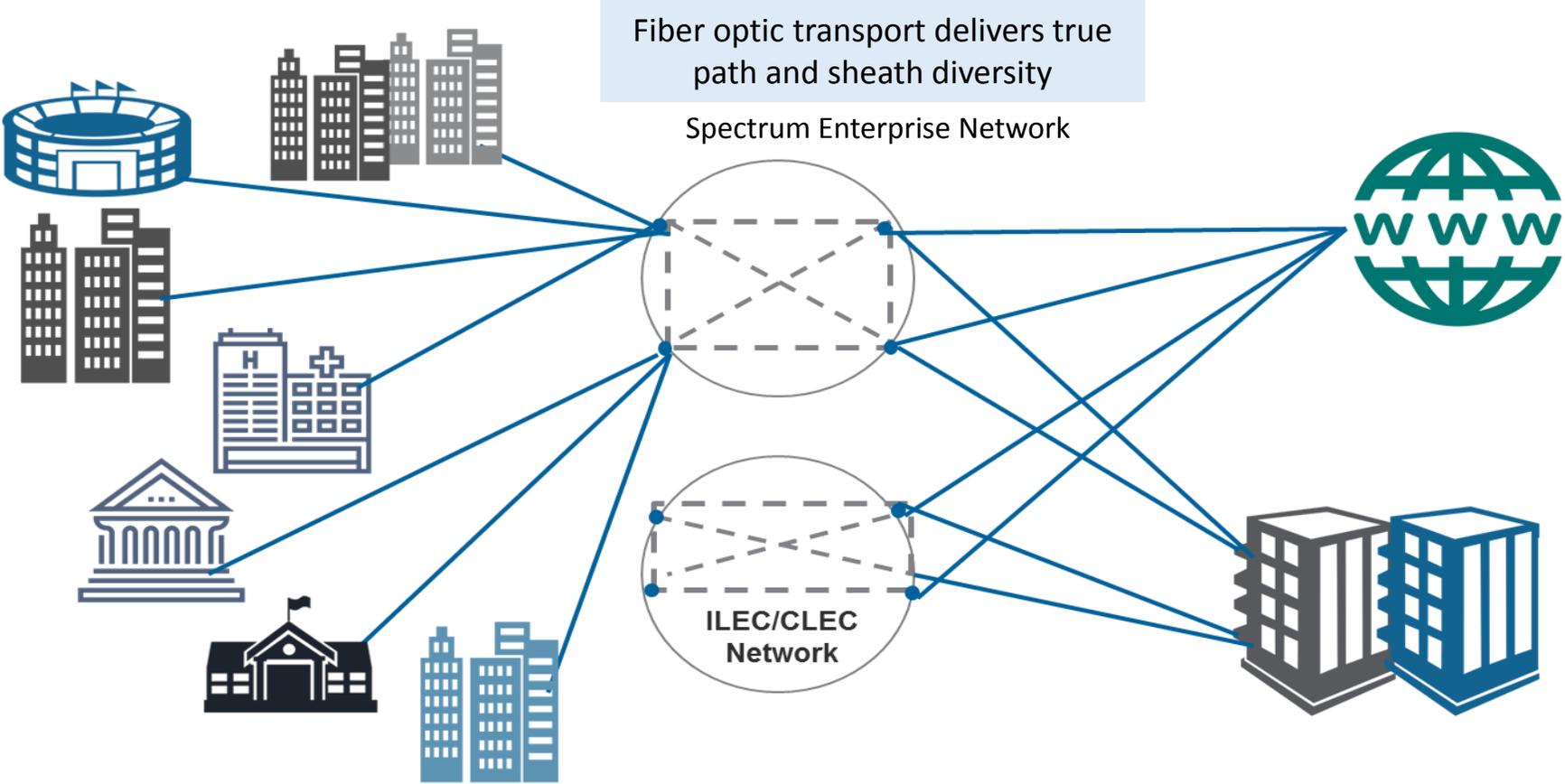
Ethernet Leaderboard

- Third largest provider of Ethernet in the US
- MEF CE 2.0 certified
- Complete bypass of local Bell Central Offices
- Fully protected, carrier grade ring topology in our networks
- True Ethernet – No TDM bonding
- Scalable Bandwidth – Not ‘locked’ into TDM channels (T-1’s, DS-3’s, OC3, OC12, etc.)

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| www.verticalsystems.com | | |

Engineered for availability

How our route diversity keeps you connected



Unparalleled Route Diversity

- Diverse building entrance / POE from other Telcos
- Diverse last mile / fiber network / HUBs vs POPs
- Ability to provide a physically diverse route, if needed.

Together, we can make it happen



1. Discuss key business objectives
2. Identify core constraints and challenges
3. Outline how our technology can remove those barriers and open opportunity

Spectrum Contacts for State of WI agencies

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Thank you

www.enterprise.spectrum.com